

#### **Via Hand Delivery**

March 1, 2004

Mary L. Cottrell, Secretary
Department of Telecommunications and Energy
One South Station
Boston, MA 02110

RE: NSTAR Gas Company, D.T.E. 04-23

Dear Ms. Cottrell:

Enclosed please find the Annual Service Quality Report (the "SQ Report") for NSTAR Gas Company ("NSTAR Gas" or the "Company"). The SQ Report sets forth the Company's performance results for the year ending December 31, 2003, under the service quality plan (the "SQ Plan") that was approved for the Company by the Department of Telecommunications and Energy (the "Department") on April 17, 2002.

In 2003, the Company met or exceeded all of the established performance benchmarks, and therefore, ended the year in a net offset position. NSTAR Gas looks forward to continued success in 2004.

Should you have any questions or need additional information, please do not hesitate to contact me. Any communications should also be directed to:

Cheryl M. Kimball John K. Habib Keegan, Werlin & Pabian, LLP 265 Franklin Street Boston, MA 02110 TEL: (617) 951-1400 Letter to Mary Cottrell D.T.E. 04-23 NSTAR Gas Company March 1, 2004 Page 2 of 2

Thank you for your time and attention to this matter.

Sincerely,

Mark Reed, Esq.

Director of Government Affairs

much heed

(781) 441-3776

**Enclosures** 

cc: Caroline Bulger, Esq.

Jody Stiefel, Esq.

Joseph Rogers, Assistant Attorney General

## **Annual Service Quality Report**

## **SECTION ONE**

Year Ending December 31, 2003

DTE FORM - A



#### FORM A (Gas Companies)

#### **NSTAR Gas Company**

PENALTY PROVISIONS	Years in Database	Mean and Benchmark	Performance in 2003	Comments
PENALIT PROVISIONS	Database	benchmark	2003	Comments
		58.35%		Telephone statistic based on Calls Handled within 30
Telephone Answering Factor (%)	6	(+/- 21.17%)	79.03%	Seconds.
Emergency Answering (%)	1	NA	79.41%	Tracking emergency calls started in 2002.
Non-Emergency Answering (%)	1	NA	78.94%	Tracking non-emergency calls started in 2002.
				· ·
Service Appointments Kept (%)	3	99.57%	99.76%	Tracking service appointments started in 2000.
		97.89%		
Meter Reads (%)	6	(+/- 1.67%)	96.92%	
		0.955		
Consumer Division Cases (Cases/1000 customers)	10	(+/- 0.219)	0.644	
		\$33.37		
Bill Adjustments (\$/1000 customers)	10	(+/- \$26.77)	\$25.02	
		8.62		
Lost Time Accident Rate (# of acc/200,000 employee hours worked)	10	(+/- 3.96)	2.11	
Response To Odor Calls (%)	5	95.00%	99.39%	Benchmark fixed @ 95.00% by the Department

#### FORM A (Gas Companies)

#### **NSTAR Gas Company**

ADDITIONAL REPORTING	Years in Mean and Pe Database Benchmark		Performance in 2003	Comments
Staffing Levels	7		Union 2232 Management 855	
Restricted Work Day Rate (# of acc/200,000 employee hours worked)	10	3.23	6.06	
Property Damage > \$5K (#)	2	NA	1	
Unaccounted For Gas (Mcf)	10	NA		Performance in 2003 is estimated pending filing of DTE Annual Return
Capital Expenditures (# of projects and total \$)	10	\$19,587,276	47 \$27,725,763	
Spare Component & Inventory Policy	NA	NA	NA	
Customer Surveys (scale 1-7):				
Random (Overall Customer Satisfaction Survey)	2	NA	91.2%	
Callers (Post-Transaction Survey)	2	NA	89.2%	
Accidents				Reported above for Property Damage
Customer Service Guarantees (#; total \$)				
# of Payouts	2	NA	4	
\$ of Payouts	2	NA	\$200	

## **Annual Service Quality Plan Performance Report**

### **SECTION TWO**

Year Ending December 31, 2003

Historical Performance Data



#### **SECTION 2**

#### NSTAR Gas Company Performance Review for Year Ending December 31, 2003

#### I. Introduction

On April 17, 2002, the Department of Telecommunications and Energy (the "Department") approved a Service Quality Plan (the "SQ Plan") for NSTAR Gas Company ("NSTAR Gas," or the "Company"). In accordance with the terms of the SQ Plan, NSTAR Gas filed its first annual service-quality report on March 1, 2002. That filing established the benchmarks (using data through 2001) against which performance in the 2002 calendar-year period would be measured. In this section (Section 2) of the filing, the Company reviews: (1) the historical data underlying those benchmarks; (2) the performance results for 2003; and (3) the comparison of 2003 performance results to the established benchmarks. Items (2) and (3) are provided in this section at Schedule 1, at page 1. Item (1) is provided in Schedule 1, at page 2.

In <u>Section 3</u> of this filing, the Company has provided documentation for the reliability and safety requirements that are subject to the reporting requirements of the SQ Plan.

Also in Section 3, the Company has provided updated historical performance data through December 31, 2003. Based on this data, the Company has calculated the benchmarks that will be applied to evaluate 2004 performance data in next year's filing. In that regard, the Company has recalculated benchmarks for three measures for which there was less than the requisite level of data as of December 31, 2001. For these three measures, the benchmarks applied next year are calculated using data through December 31, 2003. As provided by the SQ Plan, benchmarks that were calculated using the requisite level of data as of December 31, 2001, are fixed for the period of the SQ Plan. The fixed and updated benchmarks for 2004 are set forth in Appendix 8.

Specifically Section 3 contains the following:

- Appendix 1: Customer Surveys
- Appendix 2: Restricted Work Day Data
- Appendix 3: Unaccounted-For Gas
- Appendix 4: Damage to Company Property In Excess of \$5,000
- Appendix 5: Capital Expenditures
- Appendix 6: Spare Component and Acquisition Inventory Policy
- Appendix 7: Staffing Levels

• Appendix 8: Updated Historical Data and Calculation of Benchmarks for 2004 Performance

#### II. Performance Review for Year Ending December 31, 2003

#### A. Customer Service and Billing Performance Measures

#### 1. <u>Telephone Service Factor</u>

For the Telephone Service Factor, the Company is required to track and report data on the percentage of telephone calls from customers that are handled within a 30-second time interval, including both emergency and non-emergency calls. NSTAR Gas began collecting data based on the percentage of calls answered within 30 seconds in 1997. Based on available data through 2002, the Company's benchmark for this measure is 58.35 percent. In 2003, the Company handled 79.03 percent of calls within 30 seconds, which was within one standard deviation of the benchmark.

Because the 2002 performance benchmark calculated for the Telephone Service Factor was based on less than 10 years of historical data, the Company has updated this benchmark to include 2003 performance. As shown in Appendix 8, the benchmark against which 2004 performance will be measured has increased from 58.35 percent to 61.30 percent.

#### 2. <u>Service Appointments Met as Scheduled</u>

As of January 1, 2000, the Company instituted a system to compile statistics on the percentage of service appointments met by Company personnel, excluding appointments missed by the customer. A "service appointment" is defined as a mutually agreed upon arrangement for service between the customer and the Company where the arrangement specifies the date for the Company's personnel to perform a service activity that requires the presence of the customer at the time of the service. Based on available data through 2002, the Company's benchmark for this measure is 99.57 percent. In 2003, the Company handled 99.76 percent of Service Appointments, which generated an offset for the company.

Because the 2002 performance benchmark calculated for Service Appointments Met was based on less than 10 years of historical data, the Company has updated this benchmark to include 2003 performance. As shown in Appendix 8, the benchmark against which 2004 performance will be measured has increased from 99.57 percent to 99.62 percent.

2

Effective January 1, 2002, the Company began to measure the percent of calls handled within a 20-second time period. For this performance measure, the Company handled 76.72 percent of calls within 20 seconds.

#### 3. <u>On-Cycle Meter Readings</u>

NSTAR Gas is required to report on the percentage of meters that are actually read by the Company in accordance with the meter-reading cycle. Based on available data through 2002, the Company's benchmark for this measure is 97.89 percent. In 2003, the Company achieved 96.92 percent of on-cycle meter reads, which is within one standard deviation of the benchmark.

Because the 2003 performance benchmark calculated for On-Cycle Meter Readings was based on less than 10 years of historical data, the Company has updated this benchmark to include 2003 performance. As shown in Appendix 8, the benchmark against which 2004 performance will be measured has changed from 97.89 percent to 97.75 percent.

#### B. Customer Satisfaction Performance Measures

#### 1. Consumer Division Cases

The Company is required to measure its performance in relation to the number of customer-complaint cases filed with the Department's Consumer Division. Based on the 10 years of data provided to the Company, the performance benchmark shown on Schedule 1 is 0.955, which will remain fixed for the duration of the service-quality plan. In 2003, the number of Consumer Division cases was 0.644, which generated an offset for the Company.

#### 2. Billing Adjustments

The Company is required to measure its performance in relation to the amount of revenue adjustments that result from the Department's intervention in a billing dispute with a residential customer. This is based on data that is compiled and reported by the Department and then provided to the Company. Based on the 10 years of data provided to the Company, the performance benchmark shown on Schedule 1 is 33.37, which will remain fixed for the duration of the SQ Plan. In 2003, the number of Billing Adjustments was 25.02, which was within one standard deviation of the benchmark.<sup>2</sup>

#### C. <u>Safety and Reliability Performance Measures</u>

#### 1. Response to Odor Calls

The SQ Plan requires the Company to measure its performance in relation to its response to all Class I and Class II odor calls. Until the Company records 10 years of

In applying the Department's penalty/offset formulae to the Company's performance data, the Company has determined that, in some instances, the maximum amount of offsets cannot be achieved. For example, the Company's 2003 SQ Report demonstrates that its benchmark for billing adjustments is set at 33.37. However, because of a wide deadband of 26.77, a maximum offset may result in 2005 for 2004 performance only if the Company's billing adjustments are calculated as (-20.18), which is impossible.

historical data and can establish a benchmark for its Response to Odor Calls, the Department has set a performance benchmark of 95 percent for all companies. In 2003, the Company achieved 99.39 percent, which generated an offset for the Company. As shown in Appendix 8, the Company's historical data has been updated to include 2003 performance.

#### 2. Lost-Work Time Accident Rate

The SQ Plan requires the Company to report on the Incidence Rate of Lost Work Time Injuries and Illness per 200,000 Employee Hours, as defined by the U.S. Department of Labor Bureau of Labor Statistics. This data is compiled and reported annually to the U.S. Department of Labor Bureau of Labor Statistics and the Company has 10 years of available data for this measure. Based on that data, the performance benchmark for this measure is 8.62. In 2003, the number of Lost Work Time Accidents was 2.11, which generated an offset for the Company.<sup>3</sup>

3

On January 1, 2002, the U.S. Department of Labor, Occupational Safety and Health Administration ("OSHA"), revised the regulations concerning the recording and reporting requirements for occupational injuries and illnesses. See 29 CFR § 1904.7. Specifically, the revised regulations require the Company to include the number of calendar days that an employee was unable to work as a result of injury, regardless of whether or not the employee was scheduled to work on those days (29 CFR § 1904.7(iv)). The Company's performance benchmark for Lost-Work Time Accident Rate, which is based on ten years of historical information, excludes weekends, holidays or other days that an employee would not normally have reported to work. Since the effective date of OSHA's regulations, the Company has maintained a log of occupational injuries or illnesses consistent with the new regulation going forward. However, for purposes of the annual service-quality report (the "SQ Report"), the Company has tracked and reported its performance consistent with the prior version of the regulation so that the performance data will match the historical data composing the performance benchmark. The Department approved the Company's 2002 SQ Report using this methodology. See 2002 Service Quality Reports for Electric Distribution and Local Gas Distribution Companies, D.T.E. 03-10 through D.T.E. 03-23 (2003).

#### NSTAR GAS COMPANY SERVICE QUALITY STANDARDS

	Required	Actual			Penalty /			esults - 2003		
	Years	Years	Historical		Offset	Max (4)			No. of	Penalty /
<u>Measures</u>	<u>History</u>	<u>Available</u>	Average(1)	Std Dev	<u>Weight</u>	<u>Penalty</u>	Observ.	<u>Variance</u>	Std Devs	(Offset)
Customer Service and Billing										
% Calls Answered (2)	10	6	58.35%	21.17%	12.5% \$	364,068	79.03%	20.68%	0.9769	-
% Service Appointments Met	10	3	99.57%	0.09%	12.5%	364,068	99.76%	0.19%	2.1111	(364,068)
% On-Cycle Meter Reads	10	6	97.89%	1.67%	10.0%	291,254	96.92%	-0.97%	-0.5808	0
Safety and Reliability										
Lost Work Day Accidents	10	10	8.62	3.96	10.0%	291,254	2.11	-6.51	-1.6439	(196,772)
% Class I & II Odor Calls(6)	NA	NA	95.00%	NA	45.0%	1,310,643	99.39%	4.39%	4	(1,310,643)
Consumer Division Statistics										
Consumer Division Cases	10	10	0.955	0.219	5.0%	145,627	0.644	-0.311	-1.4201	(73,421)
Billing Adjustments	10	10	33.37	26.77	5.0%	145,627	25.02	-8.35	-0.3119	0
Total					100.0% \$	2,912,540			\$	(1,944,903)

#### **Notes**

- (1) Telephone statistic based on calls handled within 30 Seconds; includes abandoned calls.
- (2) Max penalty is incurred at 2 sd from average
- (3) Penalty/ (Offset) equal to 25% of max apply to each percentage point below/above 95% up to the max penalty.

(4) Two percent of total T&D revenue in 2003 (estimate based on 2003 budget).\$2,912,740Less: Service Guarantee Payout200Maximum Penalty / (Offset)\$2,912,540

#### **NSTAR GAS COMPANY**

				Н	listory (1)											
Measures	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991 19	88 Sampl	Э	Average	Std Dev
Customer Service and Billing																
% Calls Answered (1)	79.08%	68.35%	81.49%	51.15%	30.90%	39.12%								6	58.35%	21.17%
% Service Appointments Met	99.66%	99.57%	99.48%											3	99.57%	0.09%
% On-Cycle Meter Reads	98.19%	98.97%	99.13%	98.50%	97.95%	94.60%								6	97.89%	1.67%
Safety and Reliability																
Lost Work Day Accidents		1.22	3.32	6.10	9.43	10.00	9.38	9.97	11.37	14.41	11.01			10	8.62	3.96
Class I & II Odor Calls	98.86%	99.28%	98.93%	98.38%	98.50%											
Consumer Division Statistics																
Consumer Division Cases		0.743	0.761	1.183	1.239	0.857	0.576	1.115	1.125	0.918	1.034			10	0.955	0.219
Billing Adjustments		10.11	4.51	30.80	22.59	24.37	11.98	41.92	40.20	50.58	96.61			10	33.37	26.77

#### Notes

(1) 12 Month period January to December.

## **Annual Service Quality Report SECTION THREE**

Year Ending December 31, 2003

Back-up Data and Supporting Schedules



#### **SECTION 3**

#### I. Non-Penalty Related Service Quality Information

Section VII of the SQ Plan sets forth a number of non-penalty related reporting requirements for the Company's annual service-quality filings. These reports are as follows:

#### **Appendix 1:** Customer Surveys

Pursuant to section III.C of the SQ Plan, NSTAR Gas conducted an annual survey of (1) overall customer satisfaction as indicated by a statistically representative sample of residential customers, and (2) post-transaction customer satisfaction as indicated by a sample of randomly selected customers who have contacted the Company's customerservice department during the year. The surveys were conducted by Research International, which is an independent research firm with significant experience in conducting customer satisfaction surveys. The results of these surveys are presented in Appendix 1.

#### **Appendix 2**: Restricted Work Day Rate

The Restricted Work Day Rate is the Incidence Rate of Restricted Work Cases Per 200,000 Employee Hours, as defined by the U.S. Department of Labor, Bureau of Labor Statistics. The Restricted Work Date Rate performance statistics for the ten most recent years ending December 31, 2003 is provided in Appendix 2.

#### **Appendix 3:** Unaccounted-For Gas

Pursuant to section VII.A of the SQ Plan, the Company is required to report its Unaccounted-For Gas on an annual basis. The information for the ten most recent years ending December 31, 2003 is provided in Appendix 3.

#### **Appendix 4:** Damage In Excess of \$5,000

Pursuant to section VII.A of the SQ Plan, the Company is required to provide information regarding damage in excess of \$5,000 that is reported to the Department's Pipeline Engineering and Safety Division. This information is provided in Appendix 4.

#### **Appendix 5:** Capital Expenditures

The Company's data on capital expenditures for the ten most recent years (1994 through 2003) is provided in Appendix 5.

#### **Appendix 6:** Spare Component and Acquisition Inventory Policy

Pursuant to section VII.F of the SQ Plan, NSTAR Gas is required to report on an annual basis its policy for identifying, acquiring, and stocking critical spare components for its distribution and transmission system. The Spare Component and Acquisition Inventory Policy is provided as Appendix 6.

#### **Appendix 7:** Staffing Levels

Staffing level information for the Company is provided in Appendix 7.

#### **Appendix 8:** Performance Benchmarks for 2004

In Appendix 8, the Company has updated historical data to include 2003 performance data in the calculation of benchmarks for the 2004 reporting period, where the benchmarks were not fixed for the duration of the SQ Plan.

#### II. Customer Service Guarantees

Pursuant to section XI of the SQ Plan, NSTAR Gas is required to provide information as to the customer payments credited as a result of the customer-service guarantee program during the service-measurement period. As indicated in the SQ Plan, NSTAR Gas credits the customer's account by \$25.00 if a meter reading is inaccurate, if the Company knowingly fails to inform a customer that it will be more than 30 minutes late for a service appointment, if there is an error in the direct payment or pay-by-phone billing systems, if the Company fails to inform a customer of a scheduled service interruption, or if the Company does not respond to a billing question by the next business day. In addition, if a new residential service line is not connected by the agreed date (after all permits are received), the first month's bill is free (minimum \$25, maximum \$100). In 2003, NSTAR Gas remitted to customers a total of \$200.00 under its Customer-Service Guarantee program.

#### III. Conclusion

As set forth above, this filing establishes the performance benchmarks for service-quality measures subject to the penalty mechanism based on historical data available through December 31, 2003. On March 1, 2005, NSTAR Gas will make its annual filing, which will compare the Company's performance in 2004 to the benchmarks established in this filing. The Company's March 2005 filing will also include documentation to satisfy all other reporting requirements set forth in the approved SQ Plan.

## **Customer Surveys**

Year Ending December 31, 2003



#### RESEARCH INTERNATIONAL



#### **MEMO**

TO NSTAR

FROM Research International

DATE February 10, 2004

RE: Residential customer satisfaction metrics (NSTAR Gas)

The following results are from a representative sample of 700 NSTAR residential customers. Of the 700 surveys, 550 were with NSTAR Electric residential customers (300 in the former Boston Edison service area, and 250 in the former COM/Electric service area) and 150 with NSTAR Gas residential customers.

Respondents were asked to evaluate their satisfaction with the service they are receiving from NSTAR Gas using a 7-point scale, where a rating of "7" means "very satisfied." "Don't know" responses are excluded from the analysis.

 Nine in ten (91.2%), or 134 of 147 NSTAR Gas customers rate positively their overall satisfaction with NSTAR (5 or higher on 7-point scale).

The raw numbers in terms of actual customer responses to the 7-point scale in 2003 are as follows:

Response codes	"1"	"2"	"3"	"4"	"5"	"6"	"7"	"DK"
Responses	3	3	4	3	26	35	73	3

The associated margin of error for the sample of 150 surveys is +/-8.0 percentage points at the midpoint of the 95% confidence level.

Jeff Banks Senior Vice President Research International/Cambridge 617.661.0110 955 Massachusetts Avenue Cambridge, MA 02139

#### RESEARCH INTERNATIONAL



#### **MEMO**

TO NSTAR

FROM Research International

DATE February 10, 2004

RE: Post-transaction residential customer satisfaction metrics (NSTAR Gas)

The following results are from a representative sample of 900 NSTAR residential customers who recently contacted NSTAR for service. Of the 900 surveys, 699 were with NSTAR Electric residential customers (443 in the former Boston Edison service area, and 256 in the former COM/Electric service area) and 201 with NSTAR Gas residential customers.

Respondents were asked to think about the most recent time they called NSTAR and to evaluate their overall satisfaction with the service they received from the customer service department of NSTAR using a 7-point scale, where a rating of "7" means "very satisfied." "Don't know" responses are excluded from the analysis.

• Nine in ten (89.2%), or 174 of 195 NSTAR Gas customers rate positively their overall satisfaction with NSTAR's customer service (5 or higher on 7-point scale).

The raw numbers in terms of actual customer responses to the 7-point scale in 2003 are as follows:

Response codes	"1"	"2"	"3"	"4"	"5"	"6"	"7"	"DK"
Responses	4	3	4	10	19	33	122	6

The associated margin of error for the overall sample of 201 surveys is +/-6.9 percentage points at the midpoint of the 95% confidence level.

Jeff Banks Senior Vice President Research International/Cambridge 617.661.0110 955 Massachusetts Avenue Cambridge, MA 02139

## **Restricted Work Day Data**

Year Ending December 31, 2003



## **Injury Statistics**

### **Restricted Duty Cases**

#### **NSTAR Gas Company**

	Hrs. Wkd.	# of Cases	Rate
1994	1,389,652	11	1.58
1995	1,323,602	5	0.76
1996	938,578	6	1.28
1997	1,119,625	8	1.43
1998	1,123,666	10	1.78
1999	1,114,857	16	2.87
2000	1,143,214	31	5.42
2001	1,145,547	37	6.46
2002	1,060,759	25	4.65
2003	1,003,262	30	6.06
		Mean	3.23
		<del>-</del>	

Incident Rate = Number of Cases x 200,000/Hours Worked

## **Unaccounted-For Gas**

Year Ending December 31, 2003



Unaccounted for Gas NSTAR Gas Company										
1994	1.11%									
1995	3.25%									
1996	3.25%									
1997	2.59%									
1998	3.71%									
1999	4.54%									
2000	1.78%									
2001	4.76%									
2002	1.53%									
2003**	2.67%									

Note 1: The unaccounted for gas for NSTAR Gas is the net result of reconciling the total gas send out to gas sold plus company use. The source of the calculation is page 72 of the Return of the NSTAR Gas Company to the DTE of Massachusetts.

<sup>\*\*</sup> Subject to change pending finalization of the Return of the NSTAR Gas Company to the DTE of Massachusetts for the Year ended December 31, 2003.

Damage in Excess of \$5,000

Year Ending December 31, 2003



Damage in Excess of \$5,000 that is reported to the Department's Pipeline Engineering and Safety Division.

• November 21, 2003: Incident in New Bedford, MA involving a multi-family residence.

## **Capital Expenditures**

Year Ending December 31, 2003



			20	03 ASQR									
	District	Area	Description	1994	<u>1995</u>	1996	<u>1997</u>	<u>1998</u>	<u>1999</u>	2000	<u>2001</u>	2002	<u>2003</u>
Dietrik													
Distrib	All Areas	All Areas	Mains - New Business	\$ 1,054	\$ 1,155	\$ 992	\$ 1,446	\$ 1,508	\$ 1,694	\$ 1,494	\$ 1,117	\$ 2,208	\$ 1,402
	All Areas	All Areas	Mains - System Improvements/Replacements	1,261	1,604	915		1,750	1,945	1,260	1,457	2,450	2,038
	All Areas	All Areas	Mains - Cast Iron Replacement	1,058	881	189		973	1,206	1,119		1,994	2,374
	All Areas	All Areas	Services - New Business	4,758	4,212	4,061	4,804	4,653	4,681	3,193		2,931	2,988
	All Areas	All Areas	Services - Replacement	3,563	3,915	3,402		3,754	3,671	2,482		2,615	3,029
	All Areas	All Areas	Corrosion - Rectifiers	10	1		8	1	-	-,			2,020
	All Areas	All Areas	Tools - Work Equipment	154	122	76		163	107	71	-	254	174
	Dedham	Hyde Park	Master Meter Project - Georgetown, Hyde Park	-	-	-	31	226	-	-	-	-	
			Providence Rd, Northbridge - Bridge Const Main	_		_	_	_	134		-	_	
			Trovidence Ftd, Ftorthibridge Endge Conet. Main						101				
	New Mains and	Services:											
			Minor Projects	-		34		-	375		-	-	
	Southboro		Prentiss Forest	-	-	-	129	270	-	-	-	-	
	Southboro	Ashland	Prospect/Main St, Ashland	-	-	-	-	-	156	-	-	-	
	Southboro	Framingham	Stapleton School, Framingham	-	-	-	-	-	293	-	-	-	
	Southboro	Milford	Village, Milford	-	-	-	-	-	88	-	-	-	
	Southboro	Framingham	Villages @ Farm Pond, Framingham	-	-	-	-	-	75	-	-	-	
	System Improve	ements - Mains ar	d Services:										
		Hopkinton	176 South St, Hopkinton	-	-	-	-	-	-	76	27	20	
			200 Camb Pk Dr #5 -Genetics	-	-	-	-	-	-	255	98	3	
		Plymouth	226 Nicks Rock Rd - Plymouth	-	1	-	-	-	-	-	-	-	
	Cambridge		640 Memorial Dr	3	-	-	-	-	-	-	-	-	
		Cambridge	770-790 Memorial Dr, Cambridge	-	-	-	-	-	-	0	106	8	
		Cambridge	80 Gerry Landing Rd., Cambridge	-		-	-	160	-		-	-	
		Grafton	Adams Crossing	-	-	-	-	-	-	-	-	-	136
		Northboro	Algonquin High, Northboro	-	-	-	-	-	-	-	-	-	104
		Worcester	Angela Rose (Franklin St#3) Worcester	-	-	-	-	-	-	5			
		Worcester	Angela Rose Gardens, Worcester	-	-	-	-	-	-	-	21	12	
	Worcester	Worcester	Annisquam St - Worcester	-	-	-	-	-	-	-	-	-	
	New Bedford	New Bedford	Arnold Street #1, New Bedford	-	-	-	-	-	228	-	-	- 447	
		Westboro	Avalon @ Flanders, Westboro	-	-	-	-	-	-	0			
		Marlboro Worcester	Avalon Orchards, Marlboro  Beacon St, Worcester	-	-	-	-	-	-	0	113 71	15	
		Worcester	Beacon St, Worcester  Beacon St, Worcester	-	-	-	-	-	-	- 0		178	1
	New Bedford	New Bedford	Belleville Ave - New Bedford	-				-	-	-		170	'
	Worcester	Worcester	Belmont St - Worcester	(4)		_	_	-	-		_	_	
	Worcester	Worcester	Belmont st #1 - Worcester	- ( · /	32	_	_	_	-	_	_	_	
	Southboro	Marlboro	Bigelow St - Marlboro	_	148	_	_	-	_	_	_	_	
	New Bedford	New Bedford	Bolton St/Cove Rd - New Bedford	-	-	_	-	-	-	_	_	-	
	Cambridge	Cambridge	Buckingham St, Cambridge	-	-	-	-	-	-	57	-	-	
	Cambridge	Cambridge	Buckingham Street, Cambridge	-	-	-	-	-	86	-	-	-	
		Worcester	Burncoat Ave	-	-			-	-	-	-	-	163
		Cambridge	Cambridge St, IP, Cambridge	-	-	-	-	-	-	24	-	-	
	Cambridge	Cambridge	Cambridge St. IP, Cambridge	-		-	-	693	409		-	-	
	Cambridge	Cambridge	Cambridge St., Cambridge	-		-	82	-	-	-		-	l
		Freetown	Campanelli NBM	-	-			-	-	-	-	-	28
	Southboro	Marlboro	Carisbrook II - Marlboro	47	-	-	-	-	-	-	-	-	
	New Bedford	New Bedford	Cedar Grove - New Bedford	-	-		-	-	-	-	-	-	
	Southboro	Shrewsbury	Centech Park- South St Shrewsbury	-	-			-	-	-		67	22
	Dedham	Needham	Central Ave - Needham	109		-	-	-	-	-		-	1
	D "	Needham	Central Ave 2, Needham	-		_	-	-	-	-	50	-	1
	Dedham	Needham	Central Ave I, Needham	-	-			-	-	-	-	-	1
	I	Needham	Central Ave, Needham	-	-	-	-	-	-	156	14	155	230

## NSTAR Gas Company 2003 ASQR Capital Spending

(Dollars in Thousands)

					/							
District	Area	Description	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<u>DISTRICT</u>	Needham	Charles River Bridge, Needham	1334	1000	1000	1001	1330	1555	2000	16	30	2000
	Cambridge	Chilton St, Cambridge		_	-	_		-	3	2	30	
	Worcester	Coburn Ave, Worcester		_	-	_		_	3	212	52	
	Worcester	Colburn Ave, Worcester			-	-	_	_		212	336	
	Holliston	Connelly Hill Est, Holliston		_	_	_		_	22	_	330	
	Hopkinton	Connelly Hill Est., Hopkinton		_	-	-		_	0	27	23	
	Ashland	Cookigham Greene, Ashland	_	-	-	-		-	0	31	113	4
Cambridge	Cambridge	Coolidge Hill Rd Cambridge	_	-	-	-		-	U	31	-	7
Southboro	Cambridge	Coolidge St	191	-	-	_		-		_	-	
Worcester	Worcester	Country Club Blvd - Worcester	- 191	-	-	-		-	-	-	-	
Southboro	Worcester	Country Meadow	16	-	-	-		-	-	_		
Southboro	Plymouth	Court St. Rt3A1, Plymouth	10	_	_	_		-	18	4	_	
New Bedford	i iyiiloutii	Court Street		_	80	_	1	_	10	-	_	
Plymouth	Plymouth	Court Street Court Street RT3A1, Plymouth	-	-	-	-	-	603	-	-		
New Bedford	New Bedford	Crapo St - New Bedford	-	145	-	-		003	-	-	-	
Worcester	New Bealola	Cross Town Feeder 5	-	145	-	_	889	-	-	-	-	
Worcester	Worcester	Cross Town Feeder 5  Cross Town Feeder, Worcester	-	-	-	-	- 009	-	11	-	-	
Now Dodford	New Bedford		- (2)	-	-	-		-	11	-		
New Bedford	Milford	Durfee & Linden, New Bedford	(2)	-	-	-	-	-	-	-	-	
Southboro		E. Main St., Milford		-				-	-	31		
	Marlboro	Elm St, Marlboro	-	-	-	-	-	-	- 10		-	
0 "	Uxbridge	Elmshade Estates, Uxbridge	-	-	-	-	-	-	16	2	-	
Southboro	Sherborne	Everett St - Sherborne	-	-	-	-	-	-	-	-	-	
Southboro	Marlboro	Farm St., Marlboro	-	-	-	-	-	-	54	58	(7)	
Southboro	Westboro	Fay Acres - Westboro	20	-	-	-	-	-	-	-	-	
Southboro		Fay Farm Estates	4	20	-	-	-	-	-	-	-	
	Ashland	Fiske Hill Est, Ashland	-	-	-	-	-	-	3	3	-	
	Marlboro	Forest St, Marlboro	-	-	-	-	-	-	-	35	0	
	Marlboro	Forest St, Marlboro	-	-	-	-	-	-	0	3	-	
Worcester	Holden	Fox Hill II - Holden	-	-	-	-	-	-	-	-	-	
Southboro	Framingham	Framingham - South St	-	-	-	-	-	-	-	-	-	
Southboro	Framingham	Framingham - Waverly St	-	-	-	-	-	-	-	-	-	
	Framingham	Framingham Schools	-	-	-	-	-	-	130	102	0	
Cambridge	Cambridge	Fresh Pond Parkway 1, Cambridge	-	-	-	-	-	148	-	-	-	
	Cambridge	Fresh Pond Pkwy, Cambridge	-	-	-	-	-	-	479	2	-	
Worcester	Worcester	Fruit St. Worcester	-	-	-	-	136	-	-	-	-	
	Worcester	Gates St, Bridge, Worcester	-	-	-	-	-	-	-	27	(26)	(29)
	Hyde Park	Georgetown, Hyde Park	-	-	-	-	-	-	(74)	(77)	-	
Dedham	Hyde Park	Georgetown, Hyde Park	-	-	-	-	-	148	-	-	-	
New Bedford		Gifford Ave #2	-	-	-	-	-	-	-	-	-	
Worcester	W. Boylston	Glenwood/Osgood Ave - West Boylston	-	-	-	-	-	-	-	-	-	
	Worcester	Good Harbor, Worcester	-	-			-	-	-		-	40
Southboro	Marlboro	Goodale Farms, Marlboro	_	-	-	-	-	-	-	-	-	
	Shrewsbury	Grafton St/Gold St, Shrewsbury	-	-	-	-	-	-	151	-	-	
	Shrewsbury	Grafton/Puritan Phase 1	-	-	-	-	-	-	-	31	11	
		Grafton/Upton NBM	-	-			-	-	-	-	-	630
	Worcester	Granby Rd/Shrew St, Worcester	-	-	-	-	-	-	-	271	0	
Worcester	Worcester	Grandview Ave - Worcester	-	-	-	-	-	-	-	-	-	
	Natick	Grove St/Walnut St, Natick	-	-	-	-	-	-	149	4	-	
	Shrewsbury	Hartford Turnpike Shrewsbury	-	-	-	-	-	-	70	13	-	
Southboro	Natick	Harvard St - Natick	-	-	-	-	-	-	-	-	-	
New Bedford	New Bedford	Hathaway Rd - New Bedford	-	-	-	-	-	-	-	-	-	
	Dartmouth	Hawthorne St, Dartmouth	-	-	-	-	-	-	-	289	-	
	Hopkinton	Hearthstone, Hopkinton	-	-	-	-	-	-	1	1	-	
	Marlboro	Hemenway St #370, Marlboro	-	-	-	-	-	-	0	21	12	
Southboro	Ashland	Heritage Estates, Ashland	-	-	-	-	-	-	-	-	-	
	Worcester	Hidden Farms, Worcester	-	-	-	-	-	-	3	6	0	
Dedham	Dedham	High St., Dedham	-	-	-	-	-	-	-	-	-	
	Holliston	Highland Ph2, Holliston	-	-	-	-	-	-	90	26	2	10
Southboro	Milford	Highland St. Milford	_	_	-	_	253	-	-	-	-	
 							_00					

## NSTAR Gas Company 2003 ASQR Capital Spending

(Dollars in Thousands)

			<u> </u>		,							
District	Area	Description	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	Holliston	Highland, Hol Ph2, Holliston								26		
	Marlboro	Hildrith St #1, Marlboro	_	_	_	_	-	_	-	36	178	-
	Shrewsbury	Hills Farm Est Ph8, Shrewsbury	_	-	_	-	_	_	2	-	-	-
Southboro	Shrewsbury	Hill's Farm Estates, Shrewsbury	3	30	_	-	_	_	-	-	_	
Worcester	Worcester	Holland St - Worcester	16	-	_	_	-	_	_	_	_	
Southboro	Framingham	Hollis St - Framingham	-	_	_	_	-	_	-	_	-	-
Southboro	Holliston	Hollis St., Holliston	_	_	_	_	_	_	-	-	-	
3333333	Hopkinton	Hopkinton Meadows, Hopkinton	_	-	_	-	_	_	-	54	(6)	-
Southboro	Westboro	Hopkinton Rd., Westboro	_	_	_	90	118	_	-	-	-	
000000	Ashland	Howard Estates, Ashland	_	_	_	-	-	_	8	_	-	-
Southboro	Framingham	Howard St., Framingham	_	-	_	-	-	-	-	_	-	
	Millbury	Howe Ave, Millbury	_	_	_	_	_	_	-	168	-	
Southboro	Hudson	Hudson - Reed Rd/Chestnut St	_	_	_	-	-	_	_	-	_	
Worcester	Worcester	Hurley Sq Rte 146	_	_	_	_	-	_	-	_	20	1
Dedham	Hyde Park	Hyde Park Ave., Hyde Park	_	_	_	_	575	_	_	_		
Dedham	Hyde Park	Hyde Park, Cambridge	_	-	_	-	-	-	-	_	115	45
Plymouth	Kingston	Independence Mall - Kingston	_	_	_	_	_	_	_	_		
- I lymodai	Worcester	Indian Hills, Worcester	_	_	_	_	_	_	55	4	-	
New Bedford	New Bedford	Kempton St., New Bedford	-	-	_	-	-	-	-	-	-	
Southboro	Sherborne	Kendall Ave - Sherborn	_	67	_	_	_	-	-	_	-	
Worcester	Worcester	King Philip Rd - Worcester	62	-	_	-	-	-	-	_	-	
vvoicestei	Worcester	King St., Worcester	- 02	_	_	-	_	-	_	73	1	
	Shrewsbury	Lake St. Shrewsbury	_	-	_	-	_	_	8	- 10	-	
Southboro	Shrewsbury	Lake Street System, Shrewsbury	-		_	_		101	-	_	_	
Codinboro	Cambridge	Larch St, Cambridge			_	_	_	-	5		-	
Worcester	Cambriage	Lincoln Sq Boy's Club	10	15	_	_	_	_	-	_	-	
Worcester		Lincoln Sq Worcester Vocational	101	-	_	-	_	_	-	_	-	
Southboro	Marlboro	Lincoln St., Marlboro	- 101	-	_	_	-			-	-	
Southboro	Maynard	Lincoln St., Maynard	_	-	_	-	_	-	_	_	-	-
Codinboro	Cambridge	Line St, Cambridge		-	_	_	_	_	158	2	-	
New Bedford	Dartmouth	Lyng St - Dartmouth	-	-	-	-	-	_	130	-	-	
New Bedioid	Cambridge	Magazine/Chestnut, Cambridge	_	-	_	_	-	-	0	1	-	
	Cambridge	Magazine/Fairmont, Cambridge	_	_	-	-	_	-	0	1	1	
	Cambridge	Magazine/Green Sts, Cambridge		_		_	_	_	-	32	81	98
Southboro	Boylston	Main St - Boylston	188	25	-	-	-	_	-	32	-	30
Southboro	Hudson	Main St - Boylston  Main St - Hudson	100	191	_	_	-			_	-	
Southboro	Maynard	Main St - Hudson  Main St - Maynard	_	-	_	-	-	-	_	_	-	
Southboro	Shrewsbury	Main St - Waynard  Main St - Shrewsbury	-	-	-	-	-	-	_	_	-	
Plymouth	Kingston	Main St. I, Kingston		-	-	116	-	-	-	_	-	
Flymouti	Kingston	Mains-Replacement (Paving Accl)	-	-	-	-	-	-	-	934	-	
	Shrewsbury	Maple Ave, Shrewsbury	_	-	_	-	_	_	_	934	104	80
	Shrewsbury	Maple Ave, Shrewsbury  Maple Ave, Shrewsbury	-		-	-	-	-	-	-	209	5
	W. Boylston	Maple St, West Boylston	-	-	-	-	-	-	158	-	209	<u> </u>
New Bedford	Mattapoisett	Marion Rd - Mattapoisett	-	329	-	-	-	-	100	-	-	
Southboro	Holliston	Marked Tree Rd - Holliston	-	329	-	-	-	-	-	-	-	
Southbold	TOUISION	Meadow Brk Village, Berlin	-	-	-	-	-	-	-	55	(12)	
	Framingham	Mellen St, Framingham	-	-	-	-	-	-	18	2	(12)	
		Mellen St., Framingham	-		-	-	-	-	- 18		(17)	
Southboro	Framingham Westboro	Milk St - Westboro	-		-	-	-	-	-	-	(17)	
Southbold	Dedham	Mill Lane, Dedham	-		-	-	-	-	-	21	34	
	Deunalli		-	-	-	-	59	262	-	۷۱	34	
	+	Minor Projects	-		76	178				-	-	
	+	Minor Projects	-	-		178	-	78 61	-	-	-	
		Minor Projects	-		145					-		
	-	Minor Projects	-	-	2	-	-	51	-	-	1	
		Minor Projects	-	-	-	63	65	-	- 100	- (047)	-	
10/	Moroostaa	Minor Projects	-	-	-	-	-	-	122	(947)	-	
Worcester	Worcester	Moreland Green - Worcester	- 404	-	-	-	-	-	-	-	-	
Cambridge	Cambridge	Mt Auburn St I - Cambridge	101	-	-	-	-	-	-	-	-	
New Bedford	New Bedford	Mt Pleasant St - New Bedford	7	-	-	-	-	-	-	-	-	

## NSTAR Gas Company 2003 ASQR Capital Spending

(Dollars in Thousands)

			,									
District	Area	Description	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Dedham	Hyde Park	Neponset Valley Pky, Hyde Park	100-7	1000	1000	160	<u>1000</u>	1000				
Plymouth	Tryde Fark	Newfield Street Loop			99	100		-	_		<del></del>	
Dedham	Worcester	North Worcester Feed - Worcester	697	_	-	-	<u>-</u>	_		_	-	
Southboro	Northboro	Northboro - Lincoln St	001		-	-		-	-		-	
Southboro	Shrewsbury	Oak St, Shrewsbury	-	_		-		-	2	_	(4)	
	Dedham	Oak/Maple/Pine, Dedham	-	-	-	-	-	-	0	1	(4)	
	Grafton		-	-	-	-		-	124	13		
		Oakmont Farms Phase 2, Grafton	-	-	-	-	-		0		10	
	Grafton	Oakmont Farms, Phase 3, Grafton	-	-	-	-	-	-		106		
Di th	New Bedford	Off Philips Rd New Bedford	-	-			-	-	-	-	35	26
Plymouth	Plymouth	Off Samoset St - Plymouth	25	-	-	-	-	-	-	-	-	
	Ashland	Orchard Hill Est 2, Ashland	-	-	-	-		-	123	26	-	
	Ashland	Oregon Heights, Ashland	-	-	-	-	-	-	2	54	-	
	Westboro	Overlook Dr, Westboro	-	-	-	-	-	-	3	61	2	
	New Bedford	Park St #3, New Bedford	-	-	-	-	-	-	100	1	-	
	Hudson	Pheasant Trail, Hudson	-	_	-	-	-	-	36	12	-	
Southboro	Westboro	Picadilly Mill - Westboro	19	55	-	-	-	-	-	-	1	
	Southboro	Pine Hill Rd Phase 1&2,Southboro	-	-	-	-	-	-	2	-	-	
	Plymouth	Pine Hills Ph 1, Plymouth	-	-			-	-	-	-	-	44
	Plymouth	Pine Hills Ph 1, Plymouth	-	-	-	-	-	-	55	0	0	76
	Plymouth	Pine Hills Ph3A, Plymouth	-	-	-	-	-	-	-	195	0	
	Plymouth	Pine Hills,Plymouth	-	-	-	-	-	-	0	33	145	
	Plymouth	Pine Hills-Ph2 8" ip pl, Plymouth	-	-	-	-	-	-	66	36	0	
Southboro		Pleasant Street	-	-	76	73	-	-	-	-	-	
Worcester	Sutton	Pleasant Valley, Sutton	-	-	-	-	-	-	-	-	167	63
Southboro	Natick	Pond St - Natick	-	146	-	-	-	-	-	-	-	
New Bedford		Pope's Island Bridge, New Bedford/Fairhaven	-	_	-	-	-	-	-	-	-	
	Framingham	Potter School, Framingham	-	-	-	-	-	-	88	4	-	
	Shrewsbury	Prospect Hill Ph2, Shrewsbury	-	-	-	-	-	-	2	-	-	
	Shrewsbury	Prospect Hills Phase 3, Shrewsbury	-	-	-	-	-	-	26	17	-	
	Marlboro	Prospect St, Marl (Southboro District)	-	_	-	-	-	-	-	73	-	
Southboro		Purchase St	-	_	-	-	-	-	-	-	-	
	Shrewsbury	Rawson Hills 3 Svc, Shrewsbury	-	_	-	-	-	-	0	2	-	-
	Cambridge	Rindge Ave, Cambridge	_	_	_	_	_	-	184	36	_	-
	Hyde Park	River St #1, Hyde Park	-	_	_	_	_	-	-	278	3	
	New Bedford	Rivet & Orchard St - New Bedford	_	170	_	-	_	-	_		-	
	Needham	Rosemary & Hillside, Needham	_		_	-	_	_	159	_	_	
Dedham	Needham	Rosemary & Hillside, Needham	_	-	_	-	_	244	-	_	_	
Dedriam	Millbury	Rt 146 (Johnson St), Millbury	_	_	-	-		-	1	_	-	
	Millbury	Rt 146/122A, Millbury	_		_	-		-	229	_	-	
	Millbury	Rt 146/122A, Millbury	-	-	-	-		-		256	6	
	Millbury		-	-	-	-		-	-		-	
Worsests -		Rt 146/Johnson St, Millbury	-	-	-	88	73	-	-	2		
Worcester	Millbury	Rte 146 (Johnson St.), Millbury	-	-	-			-	-	-		
Plymouth	Plymouth	Rte 3 Court St., Plymouth	-	-	-	-	-	-	-	-	-	
Worcester	Wordester	Rudolph St Worcester	-	- 04	-	-	-	-	-	-	-	
Southboro	Westboro	Ruggles St II - Westboro	93	81	-	-	-	-	- 70	-	-	
	Carver	S. Meadow & Main St, Carver	-	-	-	-	-	-	73	92	-	
	Worcester	Salisbury Hill, Worcester	-	-			-	-	-	-	-	19
Worcester	Holden	Salisbury St - Holden	-	-	-	-	-	-	-	-	-	
Plymouth	Plymouth	Samoset St - Plymouth	207	2	-	-	-	-	-	-	-	
Plymouth	Plymouth	Sandwich St., Plymouth	-	-	-	-	-	-	-	-	-	
Cambridge	Cambridge	Sherman St - Cambridge	19	-	-	-	-	-	-	-	-	
		Shoppes @ Blackstone	-	-			-	-	-	-	-	28
Southboro	Shrewsbury	Shrewsbury - Main St	-	-	-	-	-	-	-	-	-	
	Worcester	Shrewsbury St, Worcester	-	-		-	-	-	295	65	-	
New Bedford	New Bedford	South Rodney French Blvd	-	-	70	-	-	-	-	-	-	
	Hopkinton	South St, Hopkinton	-	-	-	-		-	69	31		
Southboro	Shrewsbury	South St., Shrewsbury	-	-	-	-	-	-	-	-	89	
Worcester	Worcester	Southbridge St. Relay - Worcester	-	-	-	-	177	-	-	-	-	
Cambridge	Cambridge	Sparks St, Cambridge	-	-	-	-	-	-	0	-	80	
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#### NSTAR Gas Company 2003 ASQR Capital Spending (Dollars in Thousands)

District							400-						
Pyrnouth	DISTRICT			1994	1995	1996	<u>1997</u>	<u>1998</u>	<u>1999</u>			2002	2003
Symbol   Symoth   Springth   Sp				-	-	-	-	-	-		65	-	
Southblow   Southblow   Sugarcoant Refletely Freedom				-	-	-		-		2	-		
Note   Section   Store   Sto				-		-		145		-	-		
Worrecator   Software   Softwar	Southboro			-	-	•	-	-		-	-		
Southborn		Freetown		-	-			-		-	-		128
New Beefford					15	•	-	1	-	-	-	-	
New Bedford   Deminating				32	-	-	-	-	-	_	-	-	
Southbron   New Bedford   Tarthin Hill New Destord   -				-	-	-	-	-	-	0	-	-	
New Bedford   Takins 18 RA, New Bedford	New Bedford	d Dartmouth	Summit Ave - Dartmouth	-	-	-		-	-	-	-	-	
Southborn	Southboro	Northboro	Tall Pines, Northboro	-	-	ı	100	ı	-	-	-		
Southboro   National Programme   The Hills, Northbridge   Southboro District)		New Bedford	Tarklin Hill Rd, New Bedford	-	-	-	-	-	-	-	73	2	
Southboro   Natick   The Senetuary #2, Natick   -   98   70   -     -		Worcester	Tatman St, Worcester	-	-	1	-	1	-	-	84		
New Berdford   New Berdford   Union SIC   New Berdford		Northbridge	The Hills, Northbridge (Southboro District)	-	-	-		-	-	5	44	37	
New Bedford   New Bedford   Union St. #2, New Bedford   -   -   83   163   -   -	Southboro	Natick	The Sanctuary #2, Natick	-	-	-	98	70	-	-	-	-	
Cambridge Canthroige Vision St. Cambridge 1283 9		Holden	The Seasons Phase 1, Holden	-	-	-	-	-	-	-	16	6	
Cambridge   Cambridge   Vassar St. Cambridge   1,283   9	New Bedford	New Bedford	Union St. #2, New Bedford	-	-	-	83	163	-	-	-	-	
Cambridge   Cambridge   Vassar St. Cambridge   1,283   9				-	-	-	-	-	-	-	42	-	
Cambridge   Vasser St, Cambridge   -	Cambridge			1.283	9	-	-	-	-	-	-	-	
Cambridge   Vasaar St. Cambridge   -				-,				-	_	_	_	_	110
Worcester   Worcester   Worcester	Cambridge			_	_		_	1	_	0	_	60	
Ashland   Village of the Americans				_	_	_	_		_		_		
Southboro   Midrod   Village Sal-Midson	VVOICCSICI			_	_			_					28
Southboro   Southboro   Shrewbury   Wahrut Ridge Estates - Shrewbury   Wahrut Ridge				_	_			-			0		20
Southboro   Strewbury   Walnut Ridge Estates - Strewabury   (1)   1     -   -   -   -   -   -   -	Southboro			-	-	-	-	•				104	22
Southboro   Shrewbury   Wainut Ridge Estates - Shrewbury   Wainut St	Southboro			-							U		23
Southboro   Shrewsbury   Wainut St. Shrewsbury   Shrewsbury   Southboro   Shrewsbury   Warner Woods - Upton   Washington St. Fairhaven   Washington St. F	Cauthhan			- (4)						-	-		
Southboro   Walnut St: Shrewsbury   Walnut St: Shrewsbury		Shrewsbury		(1)		-		-	-	-	-		
Southboro   Upton   Warren   Wordself   Washington   St. Fairhaven   St.   S		Observations		-		-		-	-	-	-		
Worcester   Worcester   Washington Heights 83 - Worcester   -   111   -   -   -   -     -				-	-	-		-		-	-		
New Bedford   Fairhaven   Washington St. Fairhaven   Washington St. #1 Hudson   Washington St. #1 Hudson   Washington St. #1 Hudson   Washington St. Natick   Washington St. Holliston   Washington Steet #1, Hudson   Washington Street #1, Washington   Washington Street #1, Washington Street #1, Washington   Washington Street #1, Washington Street #1, Washing				-	-	-		-			-		
Hudson				-				-			-		
Southboro   Natick   Washington St. Holliston   Southboro   Holliston   Southboro   Mashington St. Holliston   Southboro   Mashington St. Holliston   Southboro   Mashington St. Hatak   Southboro   Mashington Street #1, Hudson   Southboro   Mashington Street #1, Hudson   Southboro   S	New Bedford		Washington St - Fairhaven	-				1			-		
Southboro   Holliston   Washington St Holliston   Suthboro   Holliston   Washington St Holliston   Southboro   Hudson   Washington Street #1, Hudson   Southboro   Southboro   Hudson   Washington Street, Holliston   Southboro   Southboro   Hudson   Washington Street, Hudson   Southboro				-	-	-	-	-	-	6	-		
Southboro   Natick   Washington St. Natick   Southboro   Washington Street #1, Hudson   Southboro   Southboro   Washington Street, Holliston   Southboro   Washington Street, Holliston   Southboro   Southboro   Southboro   Southboro   Washington Street, Holliston   Southboro   Southb				-	-	-	-	-	-	-	60	17	
Southboro   Hudson   Washington Street #1. Hudson	Southboro	Holliston	Washington St Holliston	-	-	-	-	-	-	-	-	-	
Southboro   Holliston   Washington Street, Holliston   -   -   -   -   -   -   -   -   -	Southboro	Natick	Washington St Natick	-	-	-	-	-	-	-	-	-	
Plymouth   Plymouth   Plymouth   Water St, Plymouth   -   -   -   -   -   -   -     -     -	Southboro	Hudson	Washington Street #1, Hudson	-	-	-	-	-	118	-	-	-	
Marlboro   Waterford Dr., Marlboro   -   -   -   -   -   -   0   32   16	Southboro	Holliston	Washington Street, Holliston	-	-	-	-	-	152	-	-	-	
Marlboro   Waterford Dr., Marlboro   -   -   -   -   -   -   0   32   16	Plymouth	Plymouth	Water St., Plymouth	-	-	-	-	-	-	-	-	-	
Framingham   Waverly St, Framingham   Framingham   Framingham   Framingham   Framingham   Waverly St, Framingham   Frami		Marlboro		-	-	-	-	-	-	0	32	16	
New Bedford   Farinham   Waverly St, Framingham   -   -   -   -   -   -   -   -   247   23   1		Framingham		-	-	ı	-	1	-	234	252	2	
New Bedford   Fairhaven   Weeden Rd/Weeden PI - Fairhaven   Pairhaven   Pair				_	_	-	_	-	_				1
Worcester   Worcester   West Boylston St Regulator	New Bedford			_	_		_	1	_	_	-		
Worcester   West Boylston St. Worcester   West St Regulator   St. Regulator				_	_				_	-	_	_	22
Worcester   Worcester   Worcester   West St Regulator - Worcester   61   4	7701000101			_	_			_		_		_	
Worcester   Worcester   West St Regulator - Worcester   61   4	Worcester	VVOICCSICI		_		_	_	_			_		(1)
Dedham   Needham   West St Needham   West St Needham		Worcester		61									
Plymouth   Plymouth   Westerly Rd & Summer - Plymouth   57   3   -   -   -   -   -   -   -   -   -				01	7								
Worcester         Worcester         Western Leg Beltline - Worcester         16         57         - <t< td=""><td></td><td></td><td></td><td>57</td><td>2</td><td>-</td><td></td><td>_</td><td></td><td>_</td><td>_</td><td></td><td></td></t<>				57	2	-		_		_	_		
Worcester         Worcester         Western Leg Beltline, Worcester         -         -         -         421         46         - <t< td=""><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td>-</td><td></td><td>-</td><td>-</td><td></td><td></td></t<>						-		-		-	-		
Marlboro   Wheeler Rd, Marlboro						-		- 40			-	-	
Sutton         Whitin Rd 1, Sutton         - <td>vvorcester</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td>	vvorcester										-	-	
Worcester         Worcester         William St - Worcester         -				-	-			-		-			
Southboro         Framingham         Winch St Framingham         6         -	147		. , ,	-	-			-		-	5		1
Worcester         Windsor St, Worcester         -						-		-		-	-		
Worcester         Winter Heights, Worcester         -	Southboro			6	-	-	-	-	-	-	-	-	
Worcester         Winter Heights, Worcester         -				-	-	-	-	-	-		2	-	
Worcester   Winter Hill, Holden-Worcester   -   -   -   -   -   -   4   -   -				-	-	-	-	-	-	16	-		
				-	-	-	-	-	-		115	0	
		Worcester	Winter Hill, Holden-Worcester	-	-	-	-	-	-	4	-		
		Worcester	Winter Hill, Holden-Worcester	-	-	-	-	-	-	-	13	-3	

			NS	TAR C	as C	Comp	any													
			2003 A					g												
		_		ollars i																
District	Area	Description		1994	19	995	199	3	199	97	19	998	1:	999	2000		2001	200	02	200
Southboro	Hopkinton	Wood St Hopkinton				-				-		-		-		.			-	
New Bedford	New Bedford	Wood St., New Bedford		-		-		-		-		277		_			-		_	
	New Bedford	Wood/Slocom Sts, New Bedford				-		-		-				-			53		110	
	Westboro	Woodland Preserve, Westboro				-		-		-		-		_	46	6	21		-	
	Natick	Woodland Village, Natick				-				_		-		-	16		7		4	
Worcester	Worcester	Worcester - Barber Ave				-		_		_		_		_						
Worcester	Worcester	Worcester - College St		7		-		_		-		-		-	_		_		-	
Southboro	W. Boylston	Worcester St - W Boylston		26		-		-		-		-		-	-	-	-		-	
		Framingham Take Station		-		-		-		-		-		-	-		-		-	
	Plymouth	Pine Hills - 12" steel main, Ply		-		-		-		-		-		-	-		3,468		16	
	Plymouth	Pine Hills Bourne Rd-Take Station		-		-		-		-		-		-	-	1	802		33	
		Marlboro Take Station		-		-		-		-		-		-	-	1	-		1,201	
		Needham Take Station land acq		-		-		-		-		-		-	-	1	-		563	
		Hopk/Asland transfer line		-		-		-		-		-		-	-		-		226	
		Ponds of Plymouth - Purchase		-		-		-		-		-		-	-		-		1,934	
		Ponds of Plymouth - Infrastructure		-		-		-		-		-		-	-		-		42	
		Paving				_		_		_		_		_			_		887	
		Leased Equipment		_		_		-		_		_		-	_		-		-	
		Corrosion Rectifiers		-		-		-		-		-		-			114		-	
		Gas Supply		_		-		-		-		_		-	-		-		777	
		Technical Support		_		_		-		_		_		-	690	١	3,063		2,475	
		Construction Accounting Services		-		-		-		-		-		-	152		-		-	
		Total Distribution	\$	15,322	\$	13,547	\$ 1	),217	\$	16,169	\$	17,198	\$	17,114 \$	14,789	\$	21,686	\$	23,522 \$	
tribution - Customer	Care:																			
		Meter Purchases		1,245		1,000		256		370		665	\$	932 \$	635	5 \$	718	\$	1,426 \$	
		Automated Meter Reading		-		-		-		65		429		-		-	-		-	
		Total Distribution - Customer Care	\$	1,245	\$	1,000	\$	256	\$	435	\$	1,094	\$	932 \$	635	\$	718	\$	1,426 \$	
italized Overheads:			\$		\$	-	\$	-	\$	-	\$	-	\$	- \$	2,818	\$ \$	3,452	\$	4,572 \$	
															•					
		Total Capital Spending *	\$	16,567	\$	14,547	\$ 1	0,473	\$	16,604	\$	18,292	\$	18,046 \$	18,242	2 \$	25,856	\$	29,520 \$	
e: * Total Capital S	pending for years	s 1994 through 1999 include both Direct Charg	es and Indire	ect Charge	s by pr	oiect.										-				
Total Supital S	ponum g ron your			, c. c g c	, , , , , , , , , , , , , , , , , , ,	.,														
1994																				
1995								T												
1996							-								-					
1997																				
1998	3 \$ 5,52	20																		
	9 \$ 5,58																			

## Spare Component Acquisition & Inventory Policy and Practice

Year Ending December 31, 2003



#### **NSTAR Gas Company Spare Parts Policy and Practices**

NSTAR Gas Company ("NSTAR Gas" or the "Company") monitors and manages critical items for its gas distribution system using a state—of-the—art computerized and integrated work management and inventory-control/procurement system. This system was installed in 1999-2000, and provides for identification of common items needed for NSTAR Gas, as well as the operating systems of all of the NSTAR Companies (i.e., NSTAR Gas, Commonwealth Electric Company, Boston Edison Company and Cambridge Electric Light Company) (together the "NSTAR Companies"). Spare part requirements are periodically reviewed and updated by the Company to create efficiencies among and between the NSTAR Companies.

#### I. Gas and Electric Distribution System Spare Parts

The components of the NSTAR Gas distribution system are, for the most part, lower-cost and high-use items. Inventory levels are based on predicted numbers of: (1) replacements due to failure; (2) replacements due to wear, tear and obsolescence; and (3) new construction needs. Higher-cost, less-frequent turnover items, such as pad-mount switches, transformers, tapping and stopping equipment and regulators, are inventoried based on the same requirements.

In recent years, The NSTAR Companies have formed alliances with vendors of high-use items such as gas parts, distribution transformers, cable and overhead hardware. These alliances have proven very effective in assuring a continuous flow of high-quality components at a controlled price, as well as giving the NSTAR Companies priority treatment for emergency deliveries to cover natural disasters, which have the potential to drastically impact the system.

## II. Electric Transmission and Distribution Substation & Gas Take Station Spare Parts

Components at the substation level are much higher in cost, but much lower in number. The turnover of these components and the parts associated with them is also very low. Historically, there was a substantial inventory of substation spare parts, with very high carrying costs. Based on alternative methods for obtaining replacement parts, spare parts inventories were reviewed by NSTAR Gas, and as a result, substantially reduced.

NSTAR Gas has identified the following alternatives to maintaining a substantial inventory of spare parts:

- Establishing relationships with suppliers who maintain inventories of spare parts that can be obtained by NSTAR Gas on very short notice, as described above.
- o Utilizing equipment on the NSTAR Gas system, which has been recently replaced or upgraded, for use as spare parts. Because of the large number of

NSTAR Gas ongoing projects, this option would provide a fairly continuous supply of spare parts.

- o Maintaining relationships with utilities that utilize similar equipment.
- o Employing the use of rebuilding kits.
- o Promoting redundancy in design and parallel feeds throughout the NSTAR Gas system to reduce the need for major component inventories.

For large critical components, dedicated spares are kept and replaced as used by NSTAR Gas.

## **Staffing Levels**

Year Ending December 31, 2003



1997 THROUGH 2003		STAFFING					
Commonwealth Gas Company	1997	1998	1999	2000	2001	2002	2003
Union	392	412	401				
Management	172	200	176				
NSTAR Electric & Gas							
Union				2,264	2,272	2,324	2,232
Management				919	914	889	855

Note 1: From 1998 to 1999 and 1999 to 2000 the Company offered a voluntary separation program offered as part of the merger with Commonwealth Energy System. During the period from August 1999 through August 2000, 635 employees from the Boston Edison and Commonwealth Energy System elected to participate in this program and exited the merged company. This was a program that was negotiated with the union leadership. Under the program, approximately 300 union and 335 management employees terminated their employment.

Note 2: With the merger of BEC Energy and Commonwealth Enegry System into NSTAR Electric and Gas and resulting consolidation of operations, employees are no longer catagorized by or assigned to positions on the basis of the pre-merger operating company designations.

# NSTAR Gas Company 2004 Performance Benchmarks



NSTAR Gas Company 2004 Performance Benchmarks

	Percent	Percent	Percent	Lost	Class I&II	Consumer	
	Calls	Service	On-Cycle	Work Day	Odor	Division	Billing
<u>Year</u>	<u>Answered</u>	Appt. Met	Meter Reads	<u>Accidents</u>	<u>Calls</u>	<u>Cases</u>	<u>Adjustments</u>
	(1)				(2)		
1992				11.01		1.034	96.61
1993				14.41		0.918	50.58
1994				11.37		1.125	40.20
1995				9.97		1.115	41.92
1996				9.38		0.576	11.98
1997	39.12%		94.60%	10.00		0.857	24.37
1998	30.90%		97.95%	9.43	98.50%	1.239	22.59
1999	51.15%		98.50%	6.10	98.38%	1.183	30.80
2000	81.49%	99.48%	99.13%	3.32	98.93%	0.761	4.51
2001	68.35%	99.57%	98.97%	1.22	99.28%	0.743	10.11
2002	79.08%	99.66%	98.19%		98.86%		
2003	79.03%	99.76%	96.92%		99.39%		
N.4	04.000/	00.000/	07.75%	0.00	05 000/	0.055	20.07
Mean	61.30%	99.62%	97.75%	8.62	95.00%	0.955	33.37
Std. Dev.	20.84%	0.12%	1.57%	3.96	na	0.219	26.77
Max. Penalty	19.61%	99.38%	94.61%	16.54	91.00%	1.393	86.91
25% Penalty	40.46%	99.50%	96.18%	12.58	94.00%	1.174	60.14
25% Offset	82.15%	99.74%	99.32%	4.66	96.00%	0.736	6.60
Max. Offset	102.99%	99.86%	100.89%	0.71	99.00%	0.518	-20.18

Notes (1) Based on 30 second threshold; includes abandoned calls. Notes (2) DTE has fixed this benchmark @ 95% for all companies